

Population Ecology of Whitefly, *Bemisia tabaci*, (Homoptera: Aleyrodidae) on Brinjal

Abstract

Whitefly, *Bemisia tabaci* (Gennadius), a common insect feeding on plants, belongs to the family Aleyrodidae of the order Homoptera. The quantity of food source especially brinjal, is one of the major factors that has attracted whitefly in the area. In fact, the flight ability of whitefly enables them to search for food quickly. Thus could encourage whitefly to reproduce in great numbers and subsequently cause severe infestation in the fields. Many farmers are not interested to grow brinjal after they have gone through some bad experience due to some whitefly infestations, which have resulted in a total crop loss of brinjal fruits. At present, information on the population dynamics of whiteflies locally on brinjal is still lacking. Henceforth, these studies are indeed appropriate to generate a comprehensive understanding on the insect population, which could support an effective pest management programme and crop improvement strategy. The study was conducted at the Field Laboratory of the Faculty of Applied Science, Universiti Teknologi MARA, Shah Alam. The study on the population of whitefly larvae on brinjal plants covered all the plant strata except for the upper stratum. The populations of whitefly were aggregated (Taylor's Power Law Calculate) in first and second cropping of brinjal plants. It may be concluded that the total number of whitefly larvae were found to be most abundant in the middle stratum of the brinjal plants.

Keyword: Whitefly, *Bemisia tabaci*, Population ecology, Population dynamics